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ABSTRACT

Scores on the Coopersmith Self-Esteem Inventory were related to scores on achievement and intelligence tests, and to socioeconomic level and to teachers' ratings of student behavior, in order to test the hypothesis that student self esteem would have a positive effect on academic achievement. There was a small but statistically significant positive relationship for self-esteem scores when they were added to intelligence test scores and socioeconomic status to predict achievement test scores for 12 year old students. The self-esteem scores were also similarly related to teacher ratings of school behavior. The School-Achievement subscale of the Coopersmith inventory related more strongly to achievement test scores than did the other three subscales (General Self, Home-Parents, and Social Self-Peers). Self esteem scores showed a stronger relationship to achievement test scores than did socioeconomic status or teachers' ratings of student behavior. Further research is recommended to determine the relationship between these variables in low achievers, behavior problems, or children with low self esteem. A brief review of research using Coopersmith's Self Esteem Inventory is included. (CTM)

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THE COOPERSMITH SELF-ESTEEM INVENTORY RELATED TO ACADEMIC ACHIEVEMENT AND SCHOOL BEHAVIOR

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THE COOPERSMITH SELF-ESTEEM INVENTORY
RELATED TO ACADEMIC ACHIEVEMENT AND SCHOOL BEHAVIOR

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It is widely accepted that a student must "believe in himself" in order to perform confidently and successfully in schools. It is assumed that high self-esteem promotes happiness, social acceptance, and achievement; whereas low self-esteem contributes to failure, partly in the manner of a self-fulfilling prophecy. Similarly, the literature of clincial psychology describes the typical client as feeling worthless and inadequate. Both the psychoanalytic and the humanistic schools of psychology describe the goal of therapy as the replacement of these feelings with a realistic sense of self-worth and self-acceptance.

Many recent writings on self-esteem have been based on the self theory of Carl Rogers, whose phenomenological approach emphasizes an empathic understanding of the self as it is experienced by the client. Rogers describes the typical neurotic client as experiencing deep feelings of worthlessness. The client feels that if others understand him as he truly is, they will reject him; this leads him to avoid intimiate relationships, which leads in turn to isolation and alienation. The therapist, by showing acceptance of the client's "true" self, promotes self-acceptance. In this view, improving self-esteem creates greater happiness and permits more gratifying interpersonal relations.

This approach rests almost entirely on the introspection, intuition, and empathy of clinicians and teachers who see themselves as practicing an art, not a science. Conclusions are typically based on the observers' interpersonal interactions often with atypical individuals in a clinical setting rather than on empirical data obtained from a normal population. Coopersmith (1967, p. 3) points out two major weaknesses of this approach. One is that consensus, though pleasant, is not the same as proof. The other is that descriptions of self-esteem in these instances tend to be stated in very general terms; they do not describe specific behaviors presumed to be related to the internal feeling state called self-esteem.

Many educators believe that improved self-esteem will lead to greater academic achievement. However, it should be noted that this has nowhere been demonstrated empirically. Before embarking on intervention programs aimed at improving self-concept as an integral step in improving various aspects of school performance, it is necessary to determine the extent to which self-esteem is in fact associated with relevant outcome variables. Using the Coopersmith Self-Esteem Inventory (SEI), this study investigates the relationships between self-esteem and measures of school achievement and behavior.

The review of previous findings in this area draws primarily upon studies which have used the Coopersmith Self-Esteem Inventory; discussion of other research is limited to those studies which used an instrument primarily designed to measure self-esteem and which focused upon the relationship of self-esteem to achievement and school behavior.

The SEI (1959) is a 50 item self-evaluation scale designed to tap the child's self-perceptions in four areas: General Self, Home-Parents, School-Achievement, and Social Self-Peers. Items selected from the Rogers and Dymond Scale (1954) were reworded for use with children and were supplemented by items designed by Coopersmith. Two points are given for each item checked in the direction indicating high self-esteem.

The major norm group for the SEI (Coopersmith, 1967) consisted of 1748 10- to 12-year-old public school children from Connecticut. Mean scores were 70.1 for boys and 72.2 for girls with standard deviations of 13.8 and 12.8 respectively. The sex differences were not significant. All further analyses of the normative data appear to have been based on selected subsamples rather than the total group. Most of the analysis appearing in Coopersmith's 1967 book, The Antecedents of Self-Esteem, deal with a subsample of 85 white, middle-class boys from intact homes, with no diagnosed personality disturbances.

When Coopersmith readministered the SEI to a single fifth grade class after a 5 week period, test-retest reliability was .88. For a different sample of 56 children, Coopersmith reported test-retest reliability after 3 years to be .70. Emrick (1973) administered post-tests to 120 second and third grade students and found test-retest reliabilities after 3 weeks of .55 and .71, which he described as discouraging. He concluded, however, that the SEI was "a moderately adequate measure of student affect" (p. 49). A study of the internal consistency of the SEI using Kuder Richardson formula 20 reported reliability coefficients

ranging from .80 to .86 based on a sample of 601 fifth, ninth, and twelfth grade students (Spatz & Johnston, 1973).

Validity data for the SEI are limited in scope and ambiguous in nature. Self-inventory scales have frequently been validated through matching their results with ratings of observable behavior or with the opinions of a panel of experts. Mixed findings have resulted from validity studies employing this approach with the SEI. Coopersmith (1959) differentiated between subjective perception of esteem, which was rated on the SEI, and the objective perception of observers, which he obtained through a Behavior Rating Form. He found "substantial agreement," defined as a difference of less than 20 points in either direction, in 65% of the cases. However, as Wylie (1974) has pointed out, Coopersmith's findings regarding validity, as they are presented in his 1967 book, are largely "uninterpretable." He apparently computed a large number of correlations and tests of significance of which he reported only a small percentage. Without information regarding the remaining data, one cannot be certain how to interpret a small, selected subsample of the data.

Two studies (Michael, Plass, & Lee, 1972; Wood & Johnson, 1972), in addition to Coopersmith, have examined the construct validity of the SEI by comparing students' self-ratings with ratings made by their teachers. Wood and Johnson, using 8 to 12 year old boys enrolled in special classes for children with severe behavior problems, described the correlations between SEI scores and teachers' ranking of students' self-esteem as "low but positive," with only one of

six correlations being statistically significant. They concluded that in regard to validity the "overall evidence...was not strong." Using 30 sixth graders as subjects and two of their teachers as observers, Michael, Plass and Lee reported a similar lack of congruence between self-report and observer rating.

Taking a somewhat different approach, Nelson (1970) compared students who were ranked at opposite ends of the self-esteem continuum. He found highly significant differences ($p < .001$) between students judged by teachers to be the lowest 20% and those judged to be the highest 20% of the sample in self-esteem. Mean SEI score was 64.9 for the group rated by teachers as lowest in self-esteem ($N = 57$) and 82.4 for the group rated highest in self-esteem ($N = 56$).

It should be noted that validation through congruence with external observation may not be appropriate to an instrument based on a phenomenological theory. Phenomenologists, and self-theorists in particular, are concerned with the subjective experience of the individual rather than with "objective" descriptions of the individual as he appears to others. To the extent that one accepts the view that self-esteem is a subjective internal perception, one can never obtain external validation of its presence.

While scores on the SEI and on other similar instruments may not measure "observable" self-esteem, they nonetheless remain measures of <u>reported</u> self-esteem, a different but still potentially useful piece of information. The present investigation is concerned with the correlates of reported self-esteem whether or not such self-reports are congruent with external observation.

Of ten reported studies which have examined the relationships between the SEI and measures of school achievement, eight found significant correlations of which five were moderate (.30 and above), and three were low (.20 and below). The remaining two studies reported nonsignificant results.

Moderate correlations were found by Coopersmith, who reported a correlation of .30 ($p < .01$) between SEI and Iowa Achievement Test scores (1959) and .30 between SEI and GPA in a different sample (1967). Campbell (1965), using 158 fourth through sixth grade public school pupils, reported a correlation of .31 with Iowa Composite scores.

Richmond and Dalton (1973) conducted a study based on 100 pupils, aged 9-15, with IQ scores from 50 to 75, enrolled in classes for the educable mentally retarded (EMR). They found that EMR students whom teachers ranked above the mean academically had significantly higher self-esteem scores than did those ranked below the mean, except in the area of Social Self-Peers. However, there were no significant differences in self-esteem between students whom teachers ranked above and below the mean on social or on emotional behavior.

Trowbridge (1970) examined 64 elementary school classes in Iowa of which half were in a federally designated Title I "target area" whose students were predominantly disadvantaged and half were not. She reported the unexpected finding that lower class students had significantly higher SEI scores than did middle class students. However, in "target areas," black students made up from 16 to 80% of the population. Since no information was given on the percentage of black pupils in non-target schools, there remains a question of whether or not the observed differences were

related to differences in racial composition of the two groups. Moderate correlations between self-esteem and achievement (r = .36 to .45) were found within each social class grouping. However, since the middle class students had the lower SEI but higher reading achievement scores, the correlations disappeared when the two groups were combined.

In a larger study based on 3,789 students from central Iowa, Trowbridge (1971) reported that SEI mean scores were significantly higher ($p < .05$) for low than for middle SES children (74.1 vs 58.4), for blacks than for whites (73.6 vs. 70.0), and for subjects from rural and small town areas than for those from urban and suburban areas (72.5 vs 69.6). There were no significant sex differences. No achievement data were reported in this study; however, its results do provide some support for Trowbridge's previous finding that groups which typically tend to achieve less well in school (such as low SES subjects) have higher SEI scores than do groups which typically have higher achievement scores (such as middle SES subjects).

Kunce, Getsinger, and Miller (1972) used the entire ninth grade class, 247 students, of the only junior high in a small midwestern city. They found low but significant positive correlations (r = .20, .15, and .15) between a modified form of the SEI consisting of fifteen items and grade point average. They also found a correlation of .16 between the SEI and the Differential Apptitude Test, but no significant relationship between the SEI and Herman-Nelson intelligence test scores. They concluded that the relationship between self-esteem and achievement was so small that efforts to improve self-esteem would probably have little effect on achievement.

Nelson (1970) reported low, positive, and mostly significant correlations (r's from .12 to .28) between SEI and Stanford Achievement scores, and correlations ranging from .11 to .23 between SEI and Lorge-Thorndike IQ scores based on a sample of 298 fourth, fifth, and sixth grade students from a suburban Minnesota community. Nelson also found a significant difference in mean IQ scores between those subjects rated by teachers as being in the highest 20% and those in the lowest 20% in self-esteem. Mean verbal IQ on the Lorge-Thorndike was 98.6 for the low group and 114.8 for the high group ($p < .001$).

Nicholls (1967) investigated relationships between SEI scores and 13 measures of anxiety, intelligence, and reading achievement for 153 13-year-old children, 77 boys and 76 girls. For males, the General Self and School Academic subscales of the SEI correlated significantly with STEP Reading Form A (r's of .32 and .29 respectively). For females, only the General Self subscale showed a significant relationship to the STEP ($r = .31$). Three of the SEI subscales related significantly to PMA IQ for females (General Self, $r = .25$; Social Self-Peers, $r = .35$; and School Academic, $r = .25$), while only the School Academic subscale had a significant relationship with IQ for the males ($r = .25$).

Two studies failed to find significant correlations between SEI and achievement test scores. In a study based on 133 first grade pupils, Williams (1973) found no significant correlations between a modified short form of the SEI which was read to the subjects and either the California Achievement Test or the Metropolitan Readiness Test. Butcher (1967) administered the SEI to a sample of 190 subjects in grades three

through six. Although a tendency toward a relationship between SEI and standardized achievement tests was reported, none of the correlations were statistically significant.

Findings of studies which have used instruments other than the SEI to measure self-esteem in relation to academic achievement are generally comparable to findings of studies based on the SEI. Of eight reported studies, four found moderate correlations between measures of self-esteem and achievement (Bledsoe, 1967; Brookover & Thomas, 1964; White & McConnell, 1974; Williams & Cole, 1968), one study found low to moderate correlations between these measures (O'Malley & Bachman, 1976), two studies found no significant correlations between these measures (Lewis, 1976; Perkins, 1958), and one study found mixed positive and negative correlations but did not report their magnitude (Wattenberg & Clifford, 1964).

Williams and Cole (1968) reported a correlation of .31 ($p < .01$) between the Tennessee Self-Concept Scale and the Reading Section of the California Achievement Test Battery and a .33 correlation ($p < .01$) between self-concept and the Arithmetic Section of the same battery for 60 sixth grade students. They found a correlation of the same magnitude, $r = .31$, between self-concept score and the California Test of Mental Maturity. Brookover and Thomas (1964) gave the Self-Concept of Ability Scale to 1,050 white seventh grade students, 513 males and 537 females, in an urban school system. They found significant correlations ($p < .05$) between self-concept and GPA ($r = .57$ for both sexes) and between self-

concept and IQ (r = .46 for males and .48 for females). When GPA was controlled, the correlation between self-concept and IQ was reduced to .17. Bledsoe (1967), using a sample of 271 fourth and sixth grade boys and girls, found his Self-Concept Scale did not correlate significantly with girls performance on either the California Achievement Tests or the California Test of Mental Maturity. However, for boys the Self-Concept Scale showed significant positive correlations with both instruments with r's from .35 to .38 on the California Achievement Tests and from .28 to .41 on the California Test of Mental Maturity.

White and McConnell (1974) based their study on the entire eight grade class (N = 267) of a relatively small, rural school system. Using the Junior Index of Motivation, the researchers found that Factor I, [illegible] General Adequacy, which is very similar to self-esteem, correlated significantly ($p < .01$) with the California Achievement Test (r = .30), Iowa Reading (r = .43), and Iowa Math (r = .23).

Two studies failed to find significant correlations between self-esteem and achievement. Perkins (1958) investigated fourth and sixth grade classes (N = 251) to examine the relationship between changes in self-esteem and changes in achievement. A "representative sample" was selected which represented extremes of the following variables: (a) group-centered versus teacher-centered social-emotional climate; (b) teacher participation in a three-year child study program versus nonparticipation; (c) teacher more versus less accepting of self and others; and (d) grade four versus grade six. A correlation computed between changes in self/ideal self congruency as shown on a Q-sort task and changes in achievement

for the sixth grade classes was not significantly different from zero (r = .08 for total achievement).

Lewis (1976) based his study on 64 students entering a special school for underachievers in the fall of 1973, of whom 87% were black, 11% Spanish-American, and 2% white. Lewis did not report correlations, but stated that for these underachieving students performance on the Self-Concept of Academic Ability Scales was related to reading achievement for students with a positive attitude towards school but no those with a negative attitude toward school.

O'Malley and Bachman (1976) conducted a longitudinal study of 1,600 males over an 8 year period from the start of tenth grade to 5 years after high school. They found significant correlations, ranging from .12 to .26, between a self-devised 10-item measure of self-esteem and measures of school achievement. They also reported significant correlations, ranging from .11 to .16, between self-esteem and socio-economic level.

One study reported generally inconclusive results. Wattenberg and Clifford (1964) compared kindergarten self-esteem ratings of 128 children with their reading achievement at the end of second grade. Only 6 out of 28 subgroup correlations were statistically significant in the predicted direction.

The purpose of the present investigation is to determine the strength of the relationships between self-esteem, as measured by the Coopersmith Self-Esteem Inventory, and measures of intelligence, socioeconomic status, educational achievement, and school behavior.

Method

Subjects

The 530 subjects in this investigation were drawn from among the 1,559 participants in the Educational Follow-Up Study (EFUS) (Balow, Anderson, Reynolds & Rubin, 1969), a prospective longitudinal investigation of the educational and behavioral outcomes associated with perinatal and early childhood conditions and events. EFUS subjects were born at the University of Minnesota Hospitals over a 5 year period during the 1960's and have been followed from the time of birth. All EFUS subjects who had been administered the SEI and Stanford Achievement tests during the summer of the calendar year in which they reached their 12th birthday were included in the present study. Teacher ratings of achievement and behavior were obtained in the spring of the school year immediately prior to the summer testing.

Measures

Self Esteem:

Coopersmith Self-Esteem Inventory (SEI)--total score and four subscales, General Self, Home-Parents, School-Achievement, and Social Self-Peers.

Achievement:

Stanford Achievement Test (SAT)--Word Meaning, Spelling, and Arithmetic Computation subtests.

Wide Range Achievement Test (WRAT)--Word Recognition, Spelling, and Arithmetic Computation.

Teacher Ratings of Achievement--teachers classified student performance in reading, arithmetic, and spelling as seriously deficient, below average, average, or above average. Values assigned to the ratings ranged from 1, assigned to a seriously deficient rating, to 4 for an above average rating.

Intelligence:

Wechsler Intelligence Scale for Children (WISC)--Full Scale IQ administered at age 7.

Behavior:

School Behavior Profile (SBP)--A 58 item scale on which the classroom teacher rates a child's behavior as observed in routine school activities (Balow & Rutin, 1973). In addition to a total score, the SBP yields subscale scores in the areas of Poor Control, Developmental Immaturity, and Anxious-Neurotic behaviors.

Teacher Ratings of Behavior--classroom teachers also were asked to assign a single overall rating of behavior. Students were rated as "no problem" (scored as 0); "moderate problem" (scored as 1); or "severe problem" (scored as 2).

Socioeconomic Status:

Socioeconomic Index scores were computed for each subject using a formula based upon parental occupation, education, and family income which yields composite scores on a 10 point scale ranging from 0 to 9.9. The mean for the population of the United States falls in the range between 5.0 and 5.9 (Myrianthopoulos & French, 1968).

Analysis

Pearson product-moment correlations between SEI scores (total and subscale) and SES, IQ, and educational and behavioral outcome measures were computed for the total group of 530 subjects. Correlations among the four SEI subscales were also computed. When it was necessary to determine the significance of the difference between any two of these correlations, the procedures described by Bruning and Kintz (1968) for testing the difference between dependent correlations were used to generate a t-statistic. An alpha reliability coefficient was computed to determine the internal consistency of the self-esteem scale.

The independent contribution of SEI in predicting school achievement and school behavior was determined by using a forced-stepwise procedure in multiple regression solutions. Using the Regression Subprogram from the Statistical Package for the Social Sciences (Nie, et al. 1975), two multiple regression equations were solved for each measure of school achievement and behavior. The first equation combined SES and IQ to predict school achievement or behavior. In the second step SEI total score was added to each regression equation. The significance of the increase in the multiple R following the addition of SEI scores was then tested.[1]

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[1] The formula used to test each increase in the multiple R is $F = \frac{(R_2^2 - R_1^2)/NADD}{(1-R_2^2)/N-NV}$ where R_1 is the multiple R before the addition; R_2 is the multiple R after the addition; NADD is the number of variables added; N is the number of subjects; and NV is the number of variables in the equation used to generate R_2.

Results

Table 1 about here

Means and standard deviations on all measures used in this study are reported in Table 1. In comparing SEI subscales it should be noted that the General Self subscale contains 26 items; each of the other three subscales contain only eight items. For the total group of 530 subjects the mean SEI score was 68.8 which is very similar to the 70.1 (male) and 72.2 (female) means which Coopersmith reported for his group of pre-adolescents. The mean School-Academic score (9.8) was somewhat lower than the means on the other two eight-item subscales--Social Self-Peers (11.8) and Home-Parents (11.4). The internal reliability of the SEI is indicated by an alpha reliability coefficient of .74.

The mean scores of 105.6 on the WISC and 53.1 on the Socioeconomic Index are both within the average range for the general population. Mean teacher ratings in each of the subject matter areas were approximately 3.0 or "average" while the mean for teacher ratings of behavior problems was .3 on a scale ranging from 0 ("no problems") to 2 ("severe problems").

Table 2 about here

Inspection of Table 2 reveals that the intercorrelations among the total and subscale scores on the SEI range from moderate to strong, are positive, and are highly significant. The strongest relationship exists between the General Self subscale and the total score ($r = .93$). The

remaining three subscales are more closely related to the total score than they are to any other subscale. The weakest relationship among the subscales exists between the Home-Parents and School-Achievement subscales (r = .41).

Table 3 about here

Table 3 presents the correlation coefficients between SEI scores and the measures of IQ, SES, achievement, and behavior. Only four of the fifteen coefficients reported in Table 3 failed to reach significance at or beyond the .05 level. SEI scores tended to be more strongly related to achievement and IQ measures than to measures of school behavior and SES. Among the achievement measures, SEI total scores showed a stronger relationship to reading and arithmetic than to spelling.

The correlations between the SEI and the achievement measures were highest for SEI total scores and for the School-Academic subscale scores. In the areas of reading and arithmetic the SEI correlated more highly with teacher ratings of their pupils than with actual pupil performance on the standardized achievement tests.

In most instances, the correlations between SEI total scores and the measures of school behavior were equal to or greater than the correlations between any single SEI subscale score and the same measure of behavior. SEI total scores correlated most strongly with the Developmental Immaturity subscale of the School Behavior Profile (r = .30). The Home-Parent SEI subscale had the highest correlation with teacher ratings of behavior and the lowest correlations with all measures of achievement.

Table 4 about here

As shown in Table 4, the zero-order correlations between SES and measures of school achievement ranged from .30 to .42. SES correlated most highly with the SAT measures of Word Meaning (r = .42) and arithmetic (r = .40). Zero-order correlations between SES and measures of behavior ranged from .10 with the Anxious-Neurotic Scale of the SBP to .26 with the Developmental Immaturity Scale of the SBP. The zero-order correlations between WISC IQ and measures of school achievement ranged from .33 to .51 while those between IQ and measures of behavior were somewhat lower, ranging from .18 to .34.

Table 5 about here

When SES and IQ were combined in multiple regression equations predicting school achievement and behavior, the resulting multiple R's (see Table 5) ranged from .41 to .59 for the achievement variables and from .21 to .39 for the behavior variables.

SEI total scores were then combined with SES and IQ in a second set of multiple regression equations. Multiple R's based on all three measures ranged from .43 to .60 in the prediction of achievement variables and from .25 to .43 in the prediction of behavior variables. Although the increases in the multiple R's achieved by adding SEI total scores to the combined SES and IQ regression equations were statistically significant ($p<.01$) for all 13 outcome variables, the absolute magnitude of these increases was slight. The largest increase obtained in any of the multiple correlation

coefficients was the .05 increase observed for SBP total score and for the Anxious-Neurotic subscale of the SBP.

Discussion

Self-esteem, as measured by the Coopersmith Self-Esteem Inventory was found to have a moderate relationship with, but not a strong independent effect on, school achievement and behavior. It was also found that SEI total and School-Achievement subscale scores related more strongly to school outcome variables than did subscale scores on General Self, Social Self-Peers, or Home-Parents.

Self-esteem scores showed a stronger relationship to intelligence and academic achievement than to socioeconomic status and school behavior. When the inter-related variables of socioeconomic status, intelligence, and self-esteem were combined in multiple regression equations to predict various aspects of school achievement and behavior, it was found that self-esteem, when added to multiple regression equations derived from SES and IQ, accounted for no more than an additional 3% of the total variance. While these increases were statistically significant, their practical significance is negligible. This finding supports the conclusion reached by O'Malley and Bachman (1976) that much of the relationship between self-esteem and educational attainment can best be explained "as reflecting a common set of prior causes--background, ability, and earlier scholastic success" (p. 38).

Although the results of this study do not lend support to the development of intervention programs aimed at increasing self-esteem as a means of improving school achievement and behavior, it should be noted that the reported relationships are based on a sample which represents

the full continuum of self-esteem and school related variables. Further research is needed to determine the relationships among these same variables for extreme groups of subjects such as children with low self-esteem, low achievement, or behavior problems, for whom programs aimed at increasing self-esteem are most apt to be instituted.

Finally, it should be recognized that results of the present investigation, which is concerned only with school learning and behavior outcomes, should not be interpreted as disproving the ultimate value of programs designed to enhance self-esteem. From a humanistic frame of reference it can certainly be maintained that children's feelings of self-worth are also a proper concern of the schools. However, if improved school performance is not the goal, then criteria which <u>are</u> considered relevant must be clearly specified if efforts to enhance feelings of self-esteem are to be evaluated.

References

Balow, B., Anderson, J., Reynolds, M., & Rubin, R. Educational and behavioral sequelae of prenatal and perinatal conditions. (USOE, BEH, Project No. 6-1176, Interim Report No. 3) Department of Special Education, University of Minnesota, September 1969.

Balow, B., & Rubin, R. School Behavior Profile. Department of Special Education, University of Minnesota, 1973.

Bledsoe, J. C. Self-concepts of children and their intelligence, achievement, interests, and anxiety. Childhood Education, 1967, 43(7), 436-438.

Brookover, W. B., & Thomas, S. Self-concept of ability and school achievement. Sociology of Education, 1964, 37(3), 271-278.

Bruning, J. L., & Kintz, B. L. Computational handbook of statistics. Glenview, Ill.: Scott, Foresman, 1968.

Butcher, D. G. A study of the relationship of student self-concept to academic achievement in six high achieving elementary schools. Unpublished doctoral dissertation, Michigan State University, 1967.

Campbell, P. B. Self concept and academic achievement in middle grade public school children. Unpublished doctoral dissertation, Wayne State University, 1965.

Coopersmith, S. A method for determining types of self esteem. Journal of Abnormal and Social Psychology, 1959, 59(1), 87-94.

Coopersmith, S. The antecedents of self-esteem. San Francisco: W. H. Freeman, 1967.

Emrick, J. A. An experimental evaluation of new measures and non-cognitive performance for elementary school children. Paper presented at the annual meeting of American Educational Research Association, New Orleans, 1973.

Kunce, J. T., Getsinger, S. H., & Miller, D. E. Educational implications of self-esteem. Psychology in the Schools, 1972, 9, 314-316.

Lewis, P. Signfficant others, self-concept of ability, and achievement. Paper presented at the annual meeting of American Educational Research Association, San Francisco, 1976.

Michael, J. J., Plass, A., & Lee, Y. B. A comparison of the self-report and the observed report in the measurement of the self-concept: Implications for construct validity. Educational and Psychological Measurement, 1972, 32(2), 481-483.

Myrianthopoulos, N. C., & French, K. S. An application of the U. S. Bureau of the Census socioeconomic index to a large diversified patient population. Social Science and Medicine, 1968, 2, 238-299.

Nelson, G. L. An investigation of selected correlates of self-concept in children. Unpublished doctoral dissertation, University of Minnesota, 1970.

Nicholls, J. G. Anxiety, defensiveness, self-esteem, and responsibility for intellectual achievement: Their relations to intelligence and reading achievement test scores. New Zealand Journal of Educational Studies, 1967, 2(2), 125-135.

Nie, N. H., Hulls, C. H., Jenkins, J. G., Steinbauer, K., & Brendt, D. H. Statistical Packages for the Social Sciences. New York: McGraw-Hill, 1975.

O'Malley, P. M., & Bachman, J. G. Self-esteem and educational attainment: A longitudinal analysis. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1976.

Perkins, H. V. Factors influencing change in children's self-concepts. Child Development, 1958, 29(2), 221-230.

Rogers, C., & Dymond, R. Psychotherapy and personality change. Chicago: University of Chicago Press, 1954.

Richmond, B. O., & Dalton, J. L. Teacher ratings and self concept reports of retarded pupils. Exceptional Children, 1973, 40(3), 178-183.

Spatz, K. C., & Johnston, J. O. Internal consistency of the Coopersmith Self-Esteem Inventory. Educational and Psychological Measurement, 1973, 33(4), 875-876.

Trowbridge, N. Effects of socio-economic class on self-concept of children. Psychology in the Schools, 1970, 7(3), 304-306.

Trowbridge, N. Relationship between self concept, school performance, and divergent thinking. Final report. Washington, D.C.: Office of Education, H.E.W., Nov. 15, 1971.

Wattenberg, W. W., & Clifford, C. Relation of self-concepts to beginning achievement in reading. Child Development, 1964, 35, 461-467.

White, W. F., & McConnell, J. Affective responses and school achievement among eighth grade boys and girls. Perceptual and Motor Skills, 1974, 38(3:2), 1295-1301.

Williams, J. H. The relationship of self-concept and reading achievement in first grade children. Journal of Educational Research, 1973, 66(8), 378-380.

Williams, R. L., & Cole, S. Self-concept and school adjustment. Personnel and Guidance Journal, 1968, 46(5), 478-481.

Wood, F. H., & Johnson, A. Coopersmith Self-Esteem Inventory scores of boys with severe behavior problems. Exceptional Children, 1972, 38(9), 739-740.

Wylie, R. C. The self-concept, Vol. 1: A review of methodological considerations and measuring instruments. (Rev. Ed.). Lincoln: University of Nebraska Press, 1974.

Table 1

Means and Standard Deviations for Measures of Self Esteem, School Achievement, School Behavior, SES and IQ

(N=530)

Measures	$\bar{X}$	S.D.
Coopersmith Self Esteem Inventory		
Total Score	68.8	16.6
General Subscale	35.8	8.8
Social Self Peers Subscale	11.8	3.6
Home Parents Subscale	11.4	3.8
School Academic Subscale	9.8	4.0
Achievement		
SAT Word Meaning	27.1	9.4
WRAT Word Meaning	77.1	10.3
Teacher Rating Reading		
WRAT Spelling	46.8	7.2
Teacher Rating Spelling	3.0	.9
SAT Arithmetic	17.2	7.3
WRAT Arithmetic	37.7	6.0
Teacher Rating Arithmetic	2.9	.9
Behavior		
School Behavior Profile		
Total Score	191.8	25.4
Developmental Immaturity Scale	50.1	9.6
Poor Control Scale	84.5	14.9
Anxious-Neurotic Scale	20.1	3.2
Teacher Rating of Behavior	.3	.6
IQ		
WISC Full Scale	105.6	14.4
SES		
Socioeconomic Index	5.3	1.0

Table 2

Pearson Product-Moment Correlation Coefficients

Among SEI Total and Subscale Scores

	Total	General Self	Social Self-Peers	Home Parents
Total				
General Self	.93*			
Social Self-Peers	.74	.59		
Home Parents	.69	.51	.43	
School Academic	.76	.63	.44	.41

* All correlation coefficients are significant at the .001 level.

Table 3

Pearson Project Moment Correlation Coefficients

Between SEI Total and Subscale Scores and

Measures of Achievement, Behavior, IQ, and SES[1]

	SEI Scores				
Measures of Achievement, Behavior, IQ, & SES	Total	General Self	Social Self Peers	Home Parents	School Academic
Achievement					
SAT Word Meaning	.31	.33	.18	.13	.27
WRAT Word Meaning	.22	.21	.13	.08*	.27
Teacher Rating Reading	.32	.28	.21	.17	.38
WRAT Spelling	.23	.25	.12	.07*	.23
Teacher Rating Spelling	.24	.22	.17	.10	.25
SAT Arithmetic	.29	.29	.16	.15	.28
WRAT Arithmetic	.26	.27	.13	.11	.27
Teacher Rating Arithmetic	.34	.32	.22	.17	.36
Behavior					
School Behavior Profile					
Total Score	.26	.21	.14	.22	.27
Developmental Immaturity Scale	.30	.26	.22	.18	.30
Poor Control Scale	.18	.13	.07*	.22	.21
Anxious-Neurotic Scale	.21	.19	.15	.17	.16
Teacher Rating of Behavior	-.21	-.14	-.12	-.25	-.20
WISC FS IQ	.31	.33	.19	.11	.28
Socioeconomic Index	.19	.19	.07*	.12	.18

[1] Coefficients not significant at or beyond the .05 level are marked with a *.

Table 4

Pearson Product Moment

Correlation Coefficients Between School Achievement

and Behavior and Measures of SES and IQ

School Achievement and Behavior	SES	WISC IQ
Achievement		
SAT Word Meaning	.42*	.45
WRAT Word Meaning	.35	.39
Teacher Rating Reading	.35	.41
WRAT Spelling	.33	.33
Teacher Rating Spelling	.30	.35
SAT Arithmetic	.40	.51
WRAT Arithmetic	.36	.47
Teacher Rating Arithmetic	.35	.43
Behavior		
School Behavior Profile		
Total Score	.20	.24
Developmental Immaturity	.26	.34
Poor Control Scale	.16	.17
Anxious-Neurotic Scale	.10	.20
Teacher Rating of Behavior	-.17	-.18

* All correlation coefficients are significant at or beyond the .01 level.

Table 5

Multiple Regression Coefficients Predicting

School Achievement and Behavior From Measures

of SES, IQ, Self-Esteem (SEI)

School Achievement and Behavior	$R_{(SES + IQ)}$	$R_{(SES + IQ + SEI)}$
Achievement Measures		
SAT Word Meaning	.55	.57[1]
WRAT Word Meaning	.48	.49
Teacher Rating Reading	.48	.51
WRAT Spelling	.42	.44
Teacher Rating Spelling	.41	.43
SAT Arithmetic	.59	.60
WRAT Arithmetic	.54	.55
Teacher Rating Arithmetic	.50	.54
Behavior Measures		
School Behavior Profile		
Total Score	.29	.34
Developmental Immaturity Scale	.39	.43
Poor Control Scale	.21	.25
Anxious-Neurotic Scale	.21	.26
Teacher Rating of Behavior	.23	.27

[1] The increases in the multiple R's resulting from the addition of SEI scores to the regression equations were significant at or beyond the .01 level for each variable.